

1.0 Navy Policy for Conducting Ecological Risk Assessments

1.0 Introduction

On 5 April 1999 the Office of the [Chief of Naval Operations](#) (CNO) issued the Navy Policy for Conducting Ecological Risk Assessments. The purpose of this policy, which amplifies the 16 May 1997 Assistant Secretary of the Navy (ASN) Environmental Policy Memorandum 97-04, Use of Ecological Risk Assessments, is to provide clarification of the Navy's policy on ecological risk assessments (ERAs) and the manner in which ERAs are to be implemented for the Navy in the Installation Restoration (IR) Program. The overarching goal of the Navy policy is that ERAs conducted for the Navy are scientifically based, defensible, and done in a manner that is cost effective and protective of human health and the environment.

2.0 ASN Environmental Policy Memorandum 97-04 Use of Ecological Risk Assessments. 16 May 1997

2.1 Introduction

The ASN (I&E) Policy Memorandum 97-04 identifies key issues and directions for ecological risk assessments (ERAs) within the Navy. This memorandum applies to environmental restoration activities performed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Restoration Act (RCRA), and applicable state laws. The 5 April 1999 [Chief of Naval Operations](#) (CNO) Policy for Conducting ERAs was issued to amplify and clarify this 1997 policy. While the ASN (I&E) policy memorandum was issued prior to the release of the EPA Superfund ecological risk assessment guidance, the CNO policy was developed to be consistent with the requirements of the EPA ERA guidance. [Click here](#) to view or download the ASN (I&E) policy.

2.2 Policy Summary

The general directions of the policy memorandum are that ERAs need to be conducted in a manner that is consistent with and supportive of the remedial decision-making process. In particular, Navy Remedial Project Managers (RPMs) need to ensure that proposed ERAs are designed to meet the specific regulatory requirements and needs for making a remedial decision. Similarly, baseline ERAs should be implemented only if a need for an ERA is supported by the results of a screening ERA. Furthermore, the RPM needs to evaluate early in the process the environmental benefits and impacts that could be incurred should active remediation be considered. Finally, when using long-term monitoring, it should be implemented only if clear-cut exit criteria are included in the monitoring plan. At locations where the contaminants

originate from both Navy and non-Navy sources, monitoring programs that incorporate exit criteria based on the attainment of contaminant levels below a specified level should be avoided.

2.3 Background and Key Issues

The policy memorandum identifies a number of key issues associated with ERAs performed for the Navy. These include:

- Past ERAs (pre-1997) did not adequately distinguish between risks posed by contaminants from Navy property and risks from other sites (non-Navy).
- The scope and problem formulation of ERAs have not been well defined, resulting in costly and unstructured assessments with unnecessarily large scopes.
- Because of the complex nature of marine ecosystems and the limitations of currently available (pre-1997) techniques and methods, marine ERAs may not provide the information necessary to support decision making.
- ERAs conducted for marine resources have not typically addressed natural attenuation.
- Despite the risk findings of marine ERAs, few realistic active remedial options are available.

2.4 General Policies

Navy officials must ensure that ERA studies provide information that is relevant to the remedial decision-making process. The ERA must be designed to allow for a risk determination and support a risk management decision.

In the absence of a human health risk, RPMs should determine as early as possible whether an active remedy would result in more ecological harm than good (e.g., would impacts of remedy implementation outweigh the remedy benefits?).

Screening-level ERAs should be conducted first by using the best available and most cost-effective technologies. The screening levels used in the screening ERA should be at regional or national levels and agreed to in advance with the regulators. If the results of the screening assessment show the contaminants that are present to be below levels of concern, then the Record of Decision (ROD) will include a finding of No Further Action (NFA). If contaminants that are present are indicated to be above levels of concern, a more thorough ERA may be warranted.

2.5 Specific Policies

ERAs should focus on ecological risks from past and current exposure pathways from Navy sites, and consider contaminant loadings from all significant sources and pathways, thus permitting mass balance evaluations for identifying Navy and non-Navy contaminant contributions.

Source control and best management practices should be used to prevent additional contaminant releases.

Sampling programs should focus primarily on the identification of potential contaminant sources and on delineating areas of contaminated media.

Sampling programs should make use of advanced chemical and biological screening technologies, data quality objectives, and statistical procedures to minimize overall sampling requirements.

Large-scale water column sampling programs should be warranted only if there is a major issue regarding contaminant flux or contaminant source determination.

If long-term monitoring is required by the regulators, well-defined exit criteria must be identified and included in the agreement. If other contaminant sources are present in addition to the Navy, the Navy should avoid implementing monitoring programs with exit criteria are based on contaminant concentrations declining to some specified levels.

If the screening results identify the need for an ERA, an evaluation of natural attenuation should be included in the ERA.

The scope of the ERA should be approved by a senior manager in consultation with Navy ERA experts.

Once an ERA is initiated, changes in regulatory personnel should not require multiple planning, data collection, and report revisions. Such revisions may be appropriate from a technical perspective.

CNO should develop standard ERA procedures and a formal process for incorporating ERA refinements and lessons learned into subsequent ERAs. This issue is addressed by the 5 April 1999 CNO Policy on Conducting ERAs.

During the January/February cleanup program In Progress Review (IPR), the amount of Environmental Restoration'Navy (ER'N) funds spent on ERAs during the fiscal year shall be identified.

Disagreements on the use of ERAs should be brought to the immediate attention of COMNAVFACENGCOMHQ, CNO (N45), CMC-LFL, and OASN (I&E), as appropriate.

2.6 Point of Contact

The ASN (I&E) point of contact is Mr. Paul Yaroschak for environmental policy matters and Mr. Roger Normand for programming and budgeting matters.

3.0 CNO Policy for Conducting Ecological Risk Assessments

On 5 April 1999, the Office of the [Chief of Naval Operations](#) (CNO) issued the Navy Policy for Conducting Ecological Risk Assessments (ERAs). The purpose of this policy, which amplifies the 16 May 1997 ASN Environmental Policy Memorandum 97-04, Use of Ecological Risk

Assessments, is to provide clarification of the Navy's policy on ERAs and the manner in which ERAs are to be conducted for the Navy Installation Restoration (IR) Program. The goals of the policy are that ERAs conducted for the Navy are scientifically based, defensible, and done in a manner that is cost effective and protective of human health and the environment. The CNO policy applies to ERAs funded under ER'N and under Base Realignment and Closure (BRAC). To view or download the policy, [click here](#).

3.1 The CNO Policy – A Tiered Approach

The CNO Policy for Conducting ERAs identifies a three-tiered approach that incorporates different levels of assessment complexity (Figure 3.1). This approach consists of the following tiers:

- Tier 1 - Screening Risk Assessment (SRA);
- Tier 2 – Baseline Ecological Risk Assessment (BERA); and
- Tier 3 – Evaluation of Remedial Alternatives.

Important aspects of this tiered approach include:

- The requirement for frequent interactions and concurrence among the Navy project team (Remedial Project Managers [RPMs], Remedial Technical Managers [RTMs], regulators, and contractors);
- Specific decision points and criteria for exiting from or proceeding with the risk assessment process (i.e., the outcome of each tier leads to a risk management decision);
- Consistency with the [EPA Superfund Interim Final Ecological Risk Assessment Guidance for Superfund](#) and the [EPA Superfund Process](#); and
- Consistency and integration with the Navy Installation Restoration Program.

The Tier 1 SRA is analogous to Steps 1 and 2 of the EPA Superfund guidance, while the Tier 2 BERA is analogous to Steps 3-7 of the EPA guidance. Tier 3 represents the evaluation of remedial alternatives that is conducted as part of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Feasibility Study (FS), and employs the CERCLA Nine Remedy Evaluation Criteria. The Navy tiered approach takes Step 8 (Risk Management) of the EPA guidance and effectively applies it throughout each of the three tiers. For example, the RPM will be making risk management decisions to proceed or exit the process (or initiate interim action) at the conclusion of both Tier 1 and 2, and will be making other management decisions in Steps 3-5 and Step 7 of Tier 2.

It is important to note that the tiered approach identified in this policy is a process and *not* a specific risk assessment method. It provides a logical, sequential process for designing and conducting ERAs and reaching defensible risk management decisions. It stresses early and frequent interactions among the RPMs, risk assessors, and regulators in order to avoid unnecessary costs, effort, and surprises.

3.1.1 Benefits of a Tiered Approach for the ERA Process

The tiered approach represents a cost- and effort-effective approach for designing and implementing ERAs. This effectiveness is achieved by focusing funding and effort only on activities that will generate data to support a risk management decision:

- The tiered approach begins with conservative assumptions and existing data to evaluate potential risk.
- The ERA proceeds to the next tier (greater level of assessment complexity) only if warranted by earlier tier results.
- The tiered approach requires clearly defined problem statements, risk hypotheses, and data needs, thus avoiding ‘shotgun’ data collection and/or collection of data that does not address the proposed problem.

The tiered approach for ERAs is also consistent with the approach employed at Navy sites for human health risk assessment.

3.2 Overview of Tier 1 – Screening Risk Assessment

3.2.1 Objectives and Framework

The Tier 1 SRA employs existing data and conservative assumptions regarding contaminant exposure in a two-step process to determine whether additional ERA or accelerated site cleanup may be warranted (Figure 3.2). The Tier 1 SRA represents a screening-level ERA and is consistent with and fully analogous to Steps 1 and 2 of the EPA Superfund eight-step process for ERAs. In general, the SRA will be conducted during the Site Inspection (SI) phase of the CERCLA process. In some cases, the SRA may occur in the Remedial Investigation (RI) phase .

Within Tier 1, the primary objective of Step 1 is to determine whether a complete exposure pathway is present between each chemical of interest and selected ecological receptors. In Step 2, risks are estimated for those chemicals for which Step 1 identified complete pathways. Risks are estimated by comparing chemical media concentrations directly to media-based threshold values, or by modeling chemical doses to ecological receptors and comparing the dose estimates to threshold dose values. These threshold values represent ‘safe’ media or dose concentrations below which no unacceptable risks are expected. Potential unacceptable risks are indicated for those chemicals that have environmental concentrations or doses that exceed the threshold values. These chemicals are now termed contaminants of potential concern (COPCs). Detailed guidance for conducting a Tier 1 SRA is provided in the Ecorisk Process section of this website. You may proceed directly to the Tier 1 guidance by selecting the following link: [Tier 1](#).

3.2.2 Tier 1 Data Requirements and Evaluation Assumptions

The Tier 1 SRA employs existing data and should not require additional or new data collection. The SRA also employs extremely conservative assumptions regarding site conditions (e.g., environmental contaminant concentrations), contaminant availability to biota (e.g., 100% bioavailability), and dose modeling input parameters (e.g., maximum body weight and food ingestion rate). While the use of conservative assumptions and values will result in an overestimate of the risks posed by site contaminants, their use is intended to be protective of

ecological resources. Because risks are overestimated, it is unlikely that a COPC will be eliminated from further consideration when it truly represents an unacceptable risk, and thus the risk assessor and regulators may feel very confident in a determination of acceptable risk.

3.2.3 Decision Criteria for Exiting Tier 1

There are two decision criteria for exiting from the Tier 1 SRA (indicated by the diamonds in Figure 3.2). The decision criteria are based on the evaluation of the existing data with respect to two conditions, the presence of a complete exposure pathway linking the contaminant with an ecological receptor, and the exceedance of a contaminant exposure threshold level. Both conditions must be in place for a site to be considered to pose a potential unacceptable risk.

At the conclusion of Step 2, there is a scientific management decision point (SMDP) at which a risk management decision is made regarding the status of the site under evaluation. This SMDP is represented by two exit criteria:

1. The site *passes* the SRA; either there are no complete exposure pathways to ecological receptors, or there is an absence of unacceptable risks (contaminant concentrations are below threshold levels). Under either of these conditions, a determination would be made that the site poses acceptable risks to ecological resources, and the site would be closed out for ecological concerns; thus, the site would exit the ERA process altogether.
2. The site *fails* the SRA; the site includes complete exposure pathways *and* unacceptable risks (contaminant concentrations exceed threshold levels). In this situation, either interim cleanup would be implemented or the site would proceed in the ERA process to Tier 2.

3.2.4 General Cost and Time Frame for Completing Tier 1

Because existing data are used to conduct the SRA, overall costs for the Tier 1 evaluation should be low. Costs will be related primarily to the compilation of existing data, a site visit, the identification of threshold values, dose modeling, and report preparation. Completion of the SRA should be relatively quick (e.g., 2-3 months), but may require a longer time period owing to the need for at least one round of regulatory review.

3.2.5 Possible Outcomes of the Tier 1 SRA

The decision criteria identify three possible outcomes of the Tier 1 SRA:

1. Ecological risks are acceptable, and no further ERA or site remediation is necessary;
2. Potential unacceptable risks are indicated, additional ERA is warranted, and the ERA process proceeds to Tier 2; or
3. Potential unacceptable risks are indicated, and accelerated site remediation (based on cost effectiveness) is initiated.

In many cases, a site will not successfully pass the SRA and will proceed either to Tier 2 or accelerated cleanup. However, many of the chemicals evaluated in the SRA will not have

complete exposure pathways or will be determined to pose acceptable risks (concentrations or doses are less than the threshold values). These chemicals can therefore be dropped from further consideration in the Tier 2 BERA or in the accelerated site cleanup. This aspect of the Tier 1 evaluation is very important. Although a site may not exit the ERA process, the number of chemicals that need to be further addressed or remediated will probably be greatly reduced, likely resulting in a significant savings in both effort and cost for the IR Program.

3.3 Overview of Tier 2 – the Baseline Ecological Risk Assessment

3.3.1 Objectives and Framework

Tier 2 represents the BERA, which is typically the most extensive activity within the ERA process in terms of data collection and analysis, cost, and effort. Tier 2 has two sets of objectives, one dealing with risk management and decision making, and the other with focusing efforts and identifying assessment objectives to avoid multiple iterations of the BERA.

From a risk management perspective, the primary objectives of Tier 2 are to:

1. Identify which, if any, of the contaminants retained as COPCs by the Tier 1 evaluation truly pose an unacceptable risk; and
2. Develop cleanup goals for those COPCs identified to pose unacceptable risks.

The Tier 2 BERA is much more site-specific and technically rigorous and much less conservative than the Tier 1 SRA. It follows a five-step process to evaluate ecological risks and to determine whether site remediation is warranted from an ecological perspective (Figure 3.1). The Tier 2 BERA is conducted during the RI phase of the CERCLA process.

Detailed guidance for conducting the Tier 2 BERA can be found in the Ecorisk Process portion of this website. You may proceed directly to this detailed guidance by selecting the following link: [Tier 2](#).

3.3.2 The Tier 2 BERA Process

Conduct of Tier 2 follows a set of five steps and includes two sets of decision criteria for exiting from or proceeding with the ERA process (Figure 3.1). The five steps that make up Tier 2 (Steps 3-7) are consistent with and analogous to Steps 3-7 of the EPA Superfund eight-step process for ERA. Tier 2 exit criteria are associated with Step 3a and Step 7. In both cases, the site under evaluation may either completely exit or continue in the ERA process.

Initiation of Tier 2 – Step 3a

The Tier 2 BERA begins (Step 3a) with a refinement of the conservative exposure assumptions employed in the Tier 1 SRA and a recalculation of the Tier 1 risk estimates. In addition to the refinement of conservative assumptions, this re-evaluation may include considerations of

background chemical concentrations, sample detection frequency, contaminant bioavailability, and realistic exposure scenarios. The results of the Step 3a refinement are then evaluated against the decision criteria for this step (Figure 3.1), and a decision is made on whether to exit from the ERA process or proceed with Tier 2.

Completing Tier 2 – Steps 3b through Step 7

If the site proceeds with Tier 2, you must follow and complete the remaining steps of this tier. Steps 3b-5 (Figure 3.1) represent the most important aspects of the Tier 2 BERA process; namely, project planning and study design and verification. These steps serve to focus the scope and magnitude of the BERA. Specifically, these steps identify (and provide the rationale for) the endpoints to be evaluated, the laboratory and field methods to be employed, the statistical analyses to be used for evaluating data, and the methods to be used for estimating and characterizing the ecological risks. By doing so, the intent of these steps is to (1) ensure that the assessment focuses on the important ecological concerns for the site, (2) ensure that the data truly necessary to make a risk management decision are collected, and (3) avoid the collection of data that are not necessary for making a risk management decision for the site in question.

An outcome of these steps is the BERA Work Plan/Sampling and Analysis Plan (WP/SAP), which identifies the nature and extent of the work to be conducted by your support contractor. Successful completion of these steps should greatly reduce if not altogether eliminate the need for multiple iterations of the BERA.

It is very important that the RPM fully understands the basis for any work proposed by the support contractor or requested by the regulators, and to understand how the proposed work is to be used to support a risk management decision. If this understanding is lacking, the RPM risks approving work that may be scientifically of interest, but is of limited value in characterizing site-related risks and supporting a risk management decision. The RPM should approve such work only after sufficient justification for the work has been provided and adequately explained.

Following completion and approval of the WP/SAP, Step 6 is implemented. This step represents the actual collection and analysis of laboratory and field data as described in the approved WP/SAP. As suggested by its name, Step 7 represents the risk characterization component of the BERA. In this step, the results obtained in Step 6 are used to characterize the nature, extent, and ecological significance of ecological risks at the site, and this characterization supports the decision criteria for exiting Tier 2.

Proceeding through Tier 2: Scientific Management Decision Points

Completion of Steps 3 – 7 requires extensive communication among and concurrence from the regulators and stakeholders. Among the steps of Tier 2, specific aspects of problem formulation, study design, and risk characterization must be negotiated among all appropriate parties prior to proceeding from one step to the next. These negotiations and concurrence are documented through SMDPs, which may take the form of letters, meeting minutes, or formal deliverables such as the WP and SAP.

If concurrence cannot be obtained, you should document the issues in question and the opposing views and positions on those issues and elevate the matter to upper management before moving to the next step in the Tier. The goal of the SMDPs is to avoid multiple iterations of the BERA and the associated impacts on budgets, schedules, and remedy implementation (if necessary). Documentation of the SMDPs provides a means of remembering agreements, and of minimizing and preferably avoiding renegotiations due to changes in Navy and regulator personnel.

3.3.3 Tier 2 Data Requirements

By itself, Tier 2 does not specify the scope and magnitude of the data collection and analysis conducted for the BERA. Rather, the scope and magnitude of the assessment will be determined as a function of the site-specific concerns (e.g., the COPCs, the ecological resources, and the spatial scale of the issues of concern) and through discussions among the Navy, the risk assessors, and the regulators. Identification of the data needs begins with problem formulation (Step 3b) and concludes with the development of data quality objectives (DQOs) and the study design (Step 4) (Figure 3.1). The BERA itself may be simple or complex, depending on site conditions.

3.3.4 Decision Criteria for Exiting Tier 2

There are two sets of decision criteria that may permit the site under investigation to fully exit Tier 2. One set of criteria are associated with Step 3a and result in a site either completely leaving the ERA process or continuing within Tier 2. The other set of criteria are considered at the conclusion of Step 7 (Figure 3.1), and result in the site fully exiting the ERA process or continuing to Tier 3.

The decision criteria for Step 3a are:

1. If the re-evaluation of the conservative exposure assumptions used in the SRA supports an acceptable risk determination, then a no further action (NFA) designation is warranted and the site *exits* the ERA process.
2. If re-evaluation of the conservative exposure assumptions does not support an acceptable risk determination and continues to indicate an unacceptable risk, then the site *continues* the BERA process at Step 3b.

If a site goes through all the steps of Tier 2, the risk characterization results obtained at the conclusion of Step 7 will be used to support a risk management decision on the basis of the following exit criteria:

1. If the site poses an acceptable risk, then no further evaluation and no remediation from an ecological perspective are warranted, and the site *exits* the ERA process.
2. If the site poses an unacceptable ecological risk and additional evaluation in the form of remedy development and evaluation is appropriate, the site *proceeds* in the ERA process to Tier 3.

3.3.5 Costs and Time Frame for Completion of Tier 2

Costs associated with the conduct of Step 3a, the re-evaluation of the Tier 1 SRA, should be low. Similar to the Tier 1 SRA, Step 3a utilizes existing data together with additional information obtained primarily from the existing literature. In addition, Step 3a employs the same dose models and risk characterization methods as those used in Tier 1; the only changes are the values of some of the input parameters. Thus, data collection and costs should be minimal.

Because of the site-specific (and thus largely unique) nature of the Tier 2 BERA beyond Step 3a, it is not possible to identify costs for completing Tier 2. Similarly, the time required for completing Tier 2 will vary from site to site, being dependent on the specific nature of the potential problem identified for the site together with the assessment and measurement endpoints selected for evaluation.

3.3.6 Possible Outcomes of Tier 2

At the conclusion of Tier 2, the BERA will provide a characterization of ecological risks posed by the site. This information will support the RPM in making one of two possible risk management decisions:

1. No further evaluation and no remediation from an ecological perspective are warranted because the site does not pose an ecological risk. Note that remediation may be necessary from a human health perspective; or
2. The site poses unacceptable ecological risks, additional evaluation in the form of remedy development and evaluation is appropriate, and the site proceeds to Tier 3.

3.4 Overview of Tier 3 – Evaluation of Remedial Alternatives

3.4.1 Objectives and Framework

The primary objective of Tier 3 (Figure 3.1) is to assist the RPM in identifying a site-specific remedy that will reduce both ecological and human health risks to acceptable levels.

Tier 3 is the evaluation of remedial alternatives with regard to:

- the effectiveness of reducing ecological risks to acceptable levels;
- ecological impacts associated with remedy implementation; and
- residual risks.

The ecological evaluations conducted under this tier are very important, yet in the past, they have often been overlooked or only minimally conducted. The ecological evaluations conducted in Tier 3 focus on the nine Remedy Evaluation Criteria identified in the NCP, which implements CERCLA. [Click here](#) for more information on the NCP.

The remedy evaluation considers factors other than risk, including balancing environmental impacts of remediation with overall risk reduction, cost and implementability of remediation, and

public acceptance. The RPM will then consider the results of the Tier 3 ecological evaluations together with similar evaluations conducted for human health, to make a remedial decision for the site. Detailed guidance regarding Tier 3 Evaluation of Remedial Alternatives can be found in the Ecorisk Process portion of this website. You may proceed directly to this detailed guidance by selecting the following link: [Tier 3](#).

3.4.2 Tier 3 Data Requirements

It is unlikely that additional field or laboratory ecological data will be necessary for the Tier 3 evaluations. However, some additional data (such as survey data for species distributions or to delineate wetland or other habitat boundaries) may be necessary in order to adequately assess potential impacts of remedies to ecological resources. The Tier 3 ecological evaluations utilize the ecological data and risk characterization results from Tier 1 and 2 to identify potential environmental impacts and residual risks associated with each remedial alternative.

3.4.3 Consequences of Inadequate Tier 3 Evaluation

If the remedial alternatives are not adequately evaluated from an ecological perspective, implementation of the selected remedy may result in an adverse ecological impact that outweighs the ecological risks posed by the site contaminants. The data collected as part of the BERA are used by the ecological risk assessment team to evaluate the effectiveness of the remedial alternatives, as well as to support the evaluation of ecological impacts associated with remedy implementation and operation.

3.5 Natural Resources

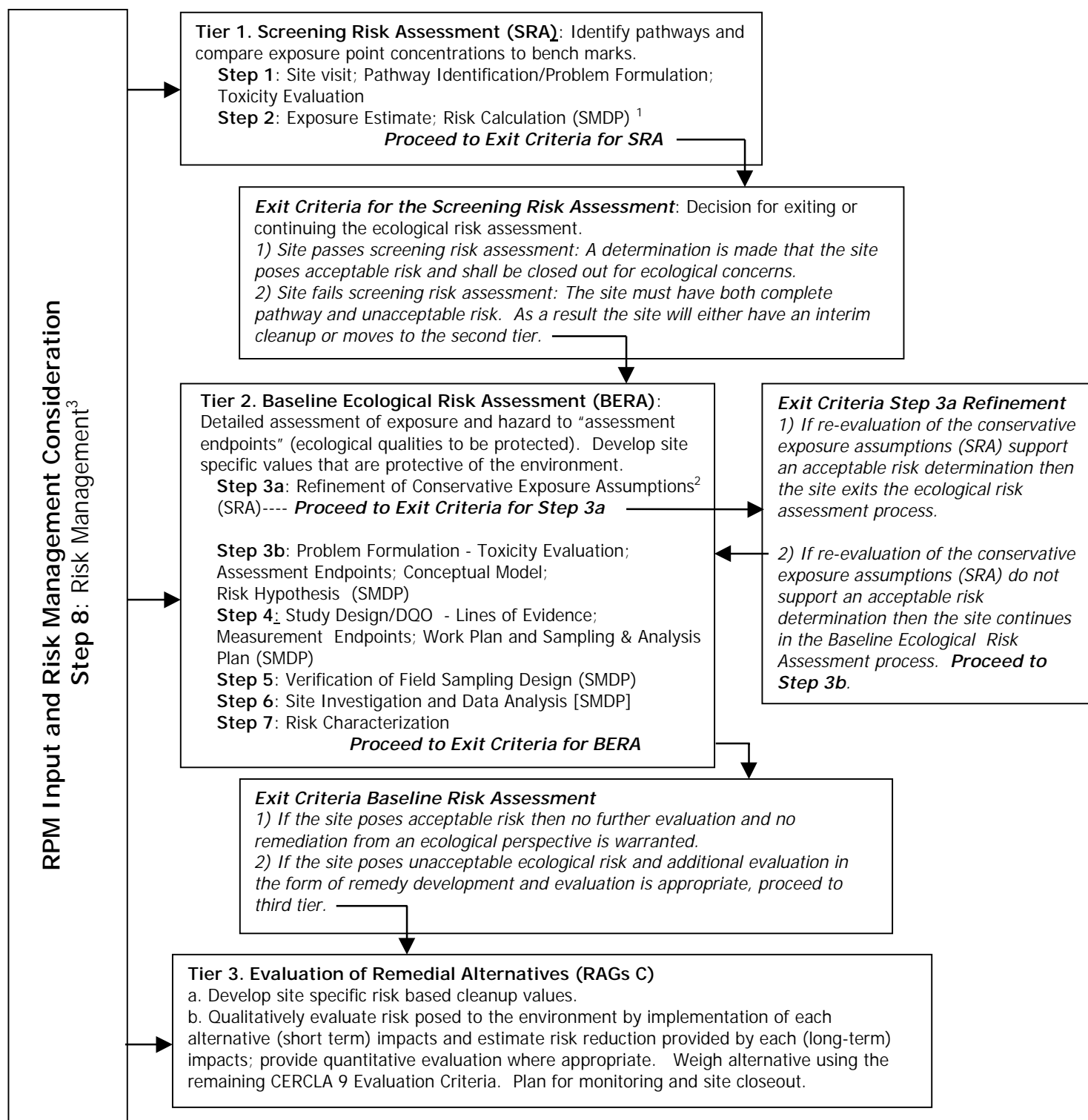
If there are natural resources that may be potentially impacted by a Navy release from the site in question, then the RPM or RTM should include the proper Natural Resource Trustee in the ERA process, to the extent practicable. It is important to note that while the Navy encourages Trustee involvement in the cleanup program, it is the Navy that is the designated lead agency for its site. Thus, it is the Navy and appropriate parties (i.e., the regulators) that make the final decisions regarding risk and site remediation. Details regarding the Navy's role as a Trustee, and the role of other Trustees in the cleanup process, can be found in the Regulatory Policy portion of this web site.

3.6 Existing Ecological Risk Assessments

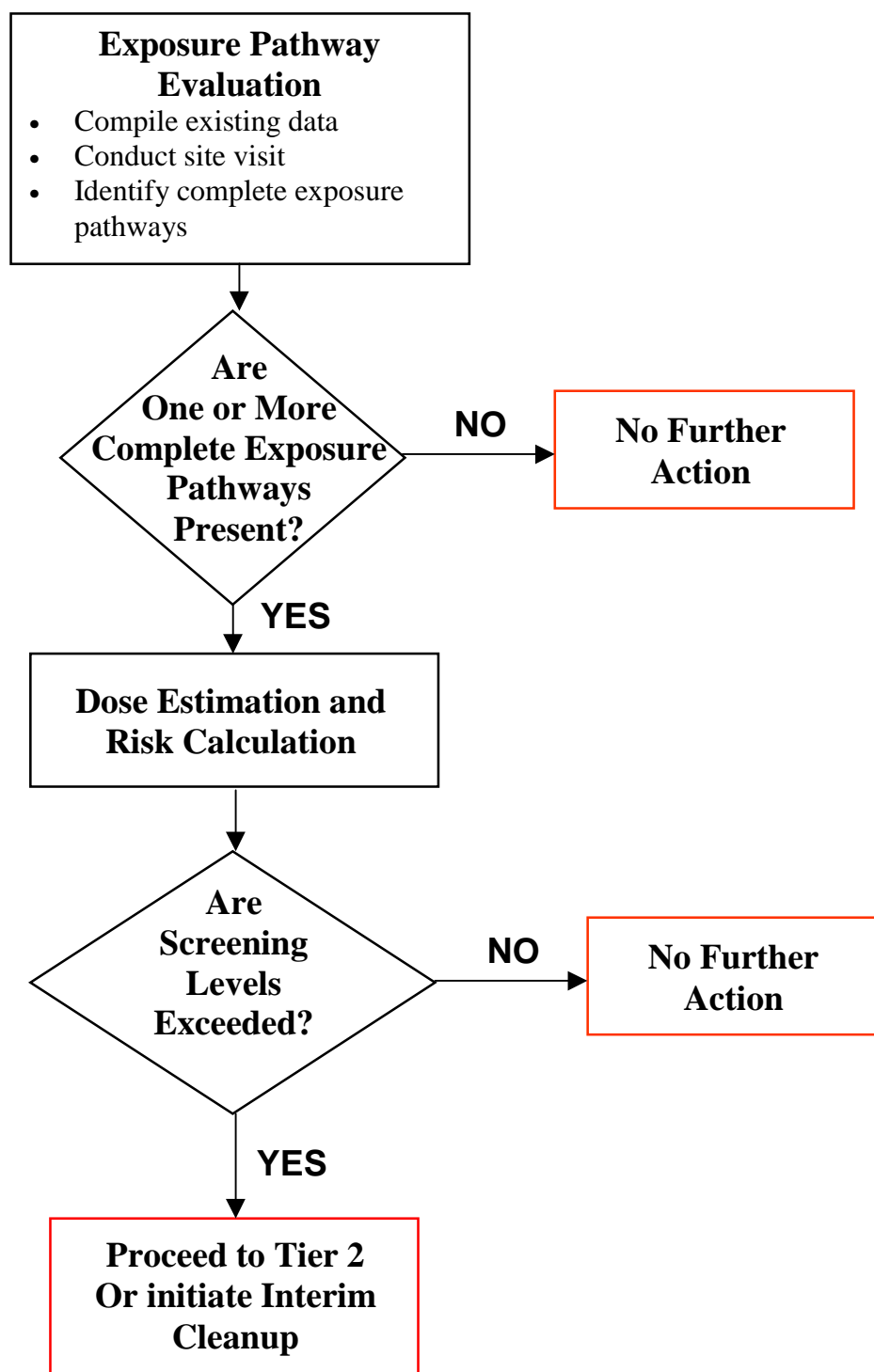
In the event that an ERA is currently underway at a site, the ERA should meet the substantive requirements of Tiers 1, 2, and 3, depending on which ERA component (SRA, BERA, or remedy evaluation) the site is undergoing.

3.7 Point of Contact

The CNO Point of Contact is Wanda L. Holmes, who may be reached by telephone at (703) 604-5420, DSN 664-5420 or via email at holmes.wanda@hq.navy.mil.

Figure 3.1. Navy Ecological Risk Assessment Tiered Approach

- Notes:
- 1) See EPA's 8 Step ERA Process for requirements for each Scientific Management Decision Point (SMDP).
 - 2) Refinement includes but is not limited to background, bioavailability, detection frequency, etc.
 - 3) Risk Management is incorporated throughout the tiered approach.

Figure 3.2. The Tier 1 Screening Risk Assessment Process.

The diamonds identify decision points for exiting from or proceeding with the Navy tiered approach for conducting ecological risk assessments.